Executive Summary

The City of Hollister (City) has developed a Long-Term Wastewater Management Program (LTWMP) for reliably treating and disposing of the City's domestic and industrial wastewater. The LTWMP presents the City's plan for wastewater treatment and effluent management of current and future wastewater flows. The LTWMP is consistent with the City's General Plan in projecting growth and associated wastewater flows.

Regional water resources management was identified as a priority in the development of the LTWMP. The evaluation of effluent management and recycled water strategies for the LTWMP was a joint coordination and planning effort by local agencies tasked with managing these resources. The City of Hollister, San Benito County (County), and the San Benito County Water District (SBCWD), collectively referenced as stakeholders, have developed a path for implementation of a LTWMP that is consistent with the responsible management of local water resources.

The stakeholders have identified the ultimate goal of the LTWMP to be to provide high quality wastewater effluent suitable for direct reuse on high value, quality sensitive crops. In order to accomplish this goal, the overall water quality in the region must be substantially improved. To this end, the stakeholders have formally agreed to accomplish this goal within a specified time line.

Wastewater Flows

Future wastewater flows were project based on projected population growth through the year 2023, which is the planning horizon for the City's General Plan. The LTWMP assumes that the City's new Domestic Wastewater Treatment Plant (DWTP) will treat wastewater from the Sunnyslope County Water District as well as from the City of Hollister in the future. Assumptions used in projecting wastewater flows are consistent with the City's General Plan and include:

- 2.6% annual increase in residential development.
- 2.9% annual increase in commercial development.
- 2.6% annual increase in school development.
- 2.67% weighted annual average increase in wastewater flow (General Plan Build-Out).
- 0.25 MGD (million gallons per day) initial flow at Ridgemark WWTP (Sunnyslope County Water District).
- 4.2% annual increase in wastewater flow from Sunnyslope County Water District (San Benito County Water District, Schaaf & Wheeler, 1999).

Based upon these assumptions and current DWTP flows, the following average dry weather flow (ADWF) projections were developed for the LTWMP:

Wastewater Flow Projections for the City of Hollister and Sunnyslope County Water District

Year	ADWF (MGD)			Year	ADWF (MGD)		
	Hollister[a]	SCWD[b]	Total		Hollister[a]	SCWD[b]	Total
2008	2.72	0.25	2.97	2016	3.36	0.35	3.71
2009	2.79	0.26	3.05	2017	3.45	0.36	3.81
2010	2.87	0.27	3.14	2018	3.54	0.38	3.92
2011	2.94	0.28	3.22	2019	3.63	0.39	4.02
2012	3.02	0.29	3.31	2020	3.73	0.41	4.14
2013	3.10	0.31	3.41	2021	3.83	0.43	4.26
2014	3.19	0.32	3.51	2022	3.93	0.44	4.37
2015	3.27	0.33	3.60	2023	4.04	0.46	4.50

[a]Domestic wastewater flows for the City of Hollister. Assumes 2.67% annual increase in flow (Ref: Hollister General Plan).
[b]Wastewater flows for Sunnyslope County Water District. Assumes 4.2% annual increase in flow (Ref: San Benito County Planning).

The DWTP design flow must allow for seasonal increases in flow due to wet weather inflow and infiltration (I/I). Historical peak wet weather flow (PWWF) at the DWTP has exceeded ADWF by as much as 10 percent. ***A design treatment capacity of 5.0 MGD was therefore selected for the DWTP to allow for 10 percent I/I.*** The LTWMP design flows for the DWTP are summarized in the following table:

Summary of Design Wastewater Flows for the DWTP

Flow Condition	Average Dry Weather Flow (ADWF)[a]	Peak Wet Weather Flow (PWWF)[b]	DWTP Design Capacity[c]	Peak Hourly Flow[d]
2023	4.5 MGD	5.0 MGD	5.0 MGD	10.0 MGD

[a]City of Hollister plus Sunnyslope County Water District combined wastewater flow for the year 2023.
[b]ADWF plus 10 percent I/I.
[c]DWTP design capacity = PWWF.
[d]Assumed to be 2.0 times the DWTP Design Capacity.

The flows at the Industrial Wastewater Treatment Plant (IWTP) are not projected to increase significantly in the future because the City does not anticipate additional dischargers to the industrial system. The industrial flows peak at approximately 3.5 MGD during the canning season from July through September. The current annual average flows to the IWTP are approximately 0.65 MGD.

DWTP Treatment

The current DWTP treatment system has a rated capacity of 2.69 MGD. The system must be upgraded to handle the increase in flows projected for this facility. Several treatment alternatives were compared before deciding on an Immersed Membrane Bioreactor (MBR) as the preferred treatment alternative. The MBR process produces a high quality effluent that meets the requirements for disinfected tertiary recycled water under the State of California Title 22 recycled water regulations. The MBR will therefore support the City in meeting its goal of maximizing the reuse of wastewater in the community. The MBR also has the advantage of being directly compatible for use with salinity control processes such as reverse osmosis. The MBR process was selected for the City's long-term wastewater treatment plant because it is a cost-effective and proven state-of-the-art technology that will:

- Protect the City from regulatory change;
- Maximize the City's effluent disposal options;
- Support potential future salinity reduction; and
- Provide an approved Title 22 recycled water technology.

The MBR process combines the principles of activated sludge treatment and membrane filtration. The activated sludge part of the treatment converts soluble waste into an active biomass. The membrane filtration technology is used to physically separate the solids from the treated liquid. The result is an effluent that is uniformly of high quality. Because of the physical barrier provided by the membranes no gravity separation of solids is required in the treatment process train. The solids concentration (biomass) in the biological reactors can therefore be significantly higher than is normally found in conventional activated sludge plants. Because of the higher concentration of biomass the MBR system is less susceptible to variations in flow or loadings when compared to a conventional activated sludge treatment system.

To meet anticipated groundwater limitations, the MBR system will be designed to meet a 5 milligrams per Liter (mg/L) effluent nitrate limit. Although the MBR plant produces a high quality effluent meeting Title 22 requirements, the MBR process does not reduce salinity. The stakeholders have agreed to achieve a lower salinity effluent by 2015 through a combination of activities including source water control, source water treatment, water softener ordinances and wastewater effluent treatment.

The proposed 5.0 MGD MBR facility would be located at the existing DWTP site and would replace the existing DWTP. The general location for the proposed MBR plant and adjacent seasonal storage reservoir is shown in **Figure ES-1.** Construction of the MBR facility would require the partial demolition of a portion of the existing treatment plant to provide space. The new treatment facilities would reuse the existing influent lift station constructed in 2003. A process flow diagram of the proposed MBR treatment plant is shown in **Figure ES-2.** The new facilities at the DWTP will include:

- Grit removal with grit classifier
- Fine screens with screening washer/compactor
- Screened wastewater flow split structure
- Biological process basins (anoxic, aeration and post-anoxic zones)
- Mixed liquor recirculation pump station
- MBR basins to house the membrane filters
- MBR permeate pumps
- Chlorine contact basins
- Plant water and effluent pump stations
- Process blower and membrane blower building
- Solids thickening and dewatering facility
- Solids stabilization basin (utilizing the existing Pond 1A)
- Chemical storage building
- Operations building, including laboratory and maintenance shop
- Septage receiving station
- Odor control biofilter
- Plant drain pump station
- New electrical power service

Figure ES-1: Proposed Location of New DWTP and Seasonal Storage Reservoir

Figure ES-2: Proposed Process Flow Diagram

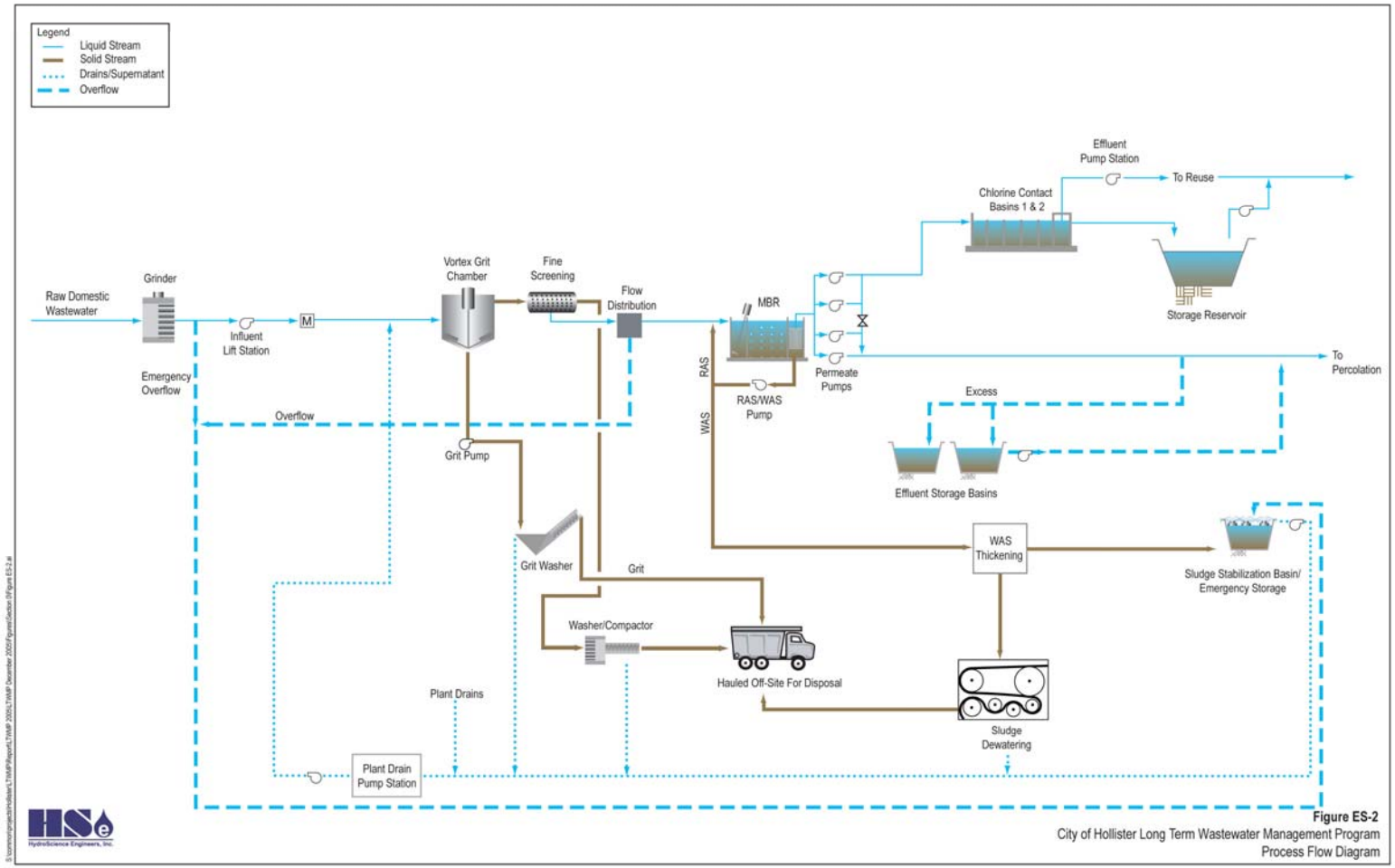


Figure ES-2
City of Hollister Long Term Wastewater Management Program
Process Flow Diagram

- Standby power generators
- Plant access/security system
- Instrumentation and control system

Because of the potential for seismic liquefaction in the underlying soils, extensive site remediation to mitigate this liquefaction potential must be included in the project. Vibro-replacement stone columns will be constructed to support the foundation of key structures. The key structures were selected to provide life safety and to provide protection of processes required to keep the plant in-service should a major seismic event occur.

IWTP Treatment

The current treatment capacity of the IWTP is 3.5 MGD. The current annual average flow to the IWTP is approximately 0.65 MGD with seasonal peaks up to 3.5 MGD during the canning season. Since there are no plans for additional flows, the IWTP is adequately sized to meet the City's needs for treatment of the industrial component of its wastewater. At this time no modifications are proposed at the IWTP.

The City, the County and SBCWD are preparing the *Hollister Urban Area Water and Wastewater Master Plan* (Master Plan), which should be complete in December 2006. As part of the Master Plan, a fate analysis of the IWTP will be conducted. The Master Plan will include recommendations for the final disposition of the IWTP. The LTWMP will then be amended to include Master Plan recommendations for the IWTP.

Water Balance

The City's goal is to ultimately dispose of 100% of its effluent through some form of recycled water irrigation. This could include crop irrigation, turf irrigation or spray field irrigation. The RWQCB will generally not allow the application of recycled water for irrigation when saturated soil conditions exist that would result in potential co-mingling of treated effluent with storm water run-off. Therefore, because of local meteorological conditions, plant physiology, and RWQCB permitting constraints, the disposal of effluent by irrigation can be assumed to be limited to the warmer and drier months in Northern California. Generally, these months run from about April until about October. Because the City will only be able to dispose of its effluent on spray fields during the dry months, it must construct seasonal storage reservoirs to store its effluent during the wet season when it cannot dispose of water.

Water balance analyses were performed to determine the amount of seasonal storage required for the two phases of the LTWMP. The water balance assumes there will be between 0.5 – 2.0 MGD of disposal in the existing percolation beds located at the DWTP and management of the remainder of effluent by landscape or spray field irrigation. No expansion of the City's percolation beds is proposed. In Phase I (Interim Effluent Management Project through 2013) it is assumed that the City will dispose of the vast majority of its effluent by spray field irrigation of pasture grass. In Phase II (Recycled Water Project through 2023) it is assumed that the City has implemented its recycled water program and all of the City's effluent is disposed of through recycled water irrigation. A summary of the water balance analyses is presented in the table below:

Summary of LTWMP Water Balance Results

Planning Criteria	Phase I 2008 through 2013	Phase II 2013 through 2023
Seasonal Storage Reservoir (AF)	1,500	2,000
Irrigated Acreage (Acres)	875[a]	1,775[b]

[a]Assumes irrigation of pasture grass with a 100-Year annual irrigation demand of 41.2 inches.
[b]Assumes irrigation of Row Crops or Turf grass with a 100-Year annual irrigation demand of 28.3 inches.

Effluent Storage

A 1,500 acre-feet (AF) seasonal storage reservoir will be constructed to provide sufficient storage for the Phase I Interim Effluent Management Project through the year 2013. The reservoir will be located on the west side of Highway 156 in a portion of the City's existing percolation beds. The reservoir will take up most of the City's parcel on the west side of Highway 156. The reservoir will have perimeter berms approximately 19-feet high. The bottom elevation of the reservoir will be set based upon local groundwater levels and to balance cut and fill soil quantities. This size reservoir will fall under the jurisdiction and requirements of the California Division of Safety of Dams (DSOD). DSOD will require the City to comply with certain requirements for design and construction of the reservoir including DSOD certification of the wastewater impoundment. It may be possible to split the reservoir into two smaller DSOD exempt reservoirs with lower berm height. An exempt wastewater impoundment is defined as an impoundment less than 15-feet high and less than 1,500 AF in volume. The feasibility of splitting the reservoir will be investigated during design.

The seasonal storage reservoir will encompass an area of approximately 77 acres with a maximum water depth of 22-feet and with 3-feet of freeboard. Piping will be routed from the DWTP to the reservoir to provide the City with the means to drain and fill the reservoir. A paved levee road will be constructed on top of the berms to provide the City with access around the reservoir. A concrete boat ramp will be constructed in the reservoir for access. A pump station at the seasonal storage reservoir will pump the stored effluent to the DWTP for distribution. The water in the reservoir will be directed either to the DWTP on-site percolation beds or to the effluent pump station, which will pump the water to the City's effluent management project.

Additional seasonal storage capacity, beyond the 1,500 acre-feet, may be required by 2013. The Phase II Recycled Water Project will require construction of an additional 500 AF of seasonal storage capacity to increase the total storage capacity to 2,000 AF. Expansion of the City's storage capacity may be accomplished by developing additional off-site storage facilities. As the Phase II Project is further defined, the location(s) of additional storage reservoirs will be determined. Selecting a location and construction of this 500 AF reservoir(s) is deferred to a later date in order to integrate the storage location and required volume into the City's Phase II Recycled Water Project. The construction of 500 AF of additional storage in the future may require supplemental CEQA documentation.

Phase I Interim Effluent Management Project

Although it is the stated goal of the City and other participating stakeholders to ultimately provide a high quality wastewater effluent suitable for direct reuse on high value sensitive crops, it is recognized by all parties that full implementation of this goal is not immediately feasible. Because a recycled water project will entail complicated planning, design and implementation efforts, and will form part of a regional water resource issue involving the City, SBCWD and San

Benito County, an interim project has to be implemented while a long-term project is being developed.

Jointly, the City, County, and SBCWD have recommended spray fields as the Phase I Interim Effluent Management Project. Direct reuse on high value crops is not feasible until salinity control measures are implemented. Because it is anticipated that the City's recycled water will initially have Total Dissolved Solids (TDS) levels of approximately 1,200 mg/L, this water will only be suitable for irrigation of plant species that can tolerate elevated salt levels. To assure adequate disposal capacity, spray fields with salt tolerant grasses must be developed during Phase I. The spray fields would be operated with the primary objective of disposing of treated effluent; however, the spray fields may also provide opportunities to irrigate pasture crops.

A Draft Technical Memorandum entitled *Phase 1 Effluent Management Project* (RMC Water and Environment, December 2005) was prepared by the City of Hollister. This TM developed information for the CEQA process, estimated irrigation demands to match projected wastewater effluent flows and develop several alternatives for the Phase I Interim Effluent Management Project. Specific parcels were not identified. Specific sites will be selected on the basis of landowner interest, infrastructure costs, feasibility, consistency with groundwater management plans, adherence to recycled water regulations, environmental constraints, and other concerns. It is anticipated that the specific Phase I project will be developed through a public process performed in conjunction with the environmental review process for the project. The overall Phase I project area is shown in **Figure ES-3**.

The City analyzed three general areas for spray field irrigation disposal within the larger project area. The three areas are: 1) Northeast Area: The area north and east of the DWTP toward the Hollister Municipal Airport; 2) Southwest Area: Areas to the south and west of the DWTP in the Freitas Road area; and 3) Northwest Area: Areas to the far northwest of the DWTP off Highway 25. All three areas have the potential to meet the irrigation requirements of approximately 3,000 acre-feet per year (AFY) or approximately 875 acres of spray field area. In addition to the use of off-site spray fields for effluent management, the City will also continue the use of the remaining on-site percolation beds for effluent disposal.

Additionally, to show the suitability of recycled water for irrigating edible food crops, an agricultural demonstration project is proposed as part of the Phase I Project. The demonstration project would consist of providing a volunteer grower with recycled water that is blended with Central Valley Project (CVP) water to achieve TDS levels of approximately 700 mg/L. The demonstration project would be limited to approximately 40 to 100 acres within the area of San Juan Valley currently served by CVP water. To mitigate salinity for this use, San Felipe water will be conveyed to the demonstration site and blended with the recycled water to achieve a TDS concentration goal of 700 mg/L. This demonstration project would include recycled water and CVP water supply pipelines; a tank for blending; and a pump system to provide pressure for the on-site irrigation system.

Phase II – Recycled Water Project

A *Draft Regional Recycled Water Project Feasibility Study Report* (RMC Water and Environment, May 2005) was prepared for the Water Resource Association of San Benito County (WRA). The WRA consists of the City of Hollister, SBCWD, Sunnyslope County Water District, and the City of San Juan Bautista. The Feasibility Study developed and recommended an Ultimate Regional Recycled Water Project. The Ultimate Regional Recycled Water Project could potentially distribute approximately 16,320 AFY of recycled water as it comes available to agricultural users throughout the San Juan Valley. The Feasibility Study further developed

phased implementation sequencing for the Ultimate Recycled Water Project. Following implementation of the Phase I Interim Effluent Management Project, a Phase II Project was identified to deliver recycled water to agricultural users in the Frietas Road area. The Phase II project area encompasses approximately 1,890 acres and has a total estimated irrigation demand of 4,600 AFY. **Figure ES-4** shows the Ultimate Recycled Water Project for the San Juan Valley including the proposed Phase II Project.

The *San Benito County Regional Recycled Water Project Facility Plan-Draft Report* (RMC Water and Environment, December 2005) evaluated three alternatives for supplying recycled water to users in the Frietas Road area for the Phase II project. The alternatives were differentiated by the level of service they would provide users. The alternatives were evaluated based upon economic and non-economic criteria and a Phase II project was recommended that would supply up to 100% of the irrigation demand in the Freitas Road area. The recommended Phase II Recycled Water Project is shown in **Figure ES-5**. Although the Phase II project is the recommended project in the Facility Plan, the City will evaluate the final project based on economic factors including a cost benefit analysis of including into Phase II the infrastructure constructed during the Phase I project.

The Phase II project area has an irrigation demand of approximately 4,600 AFY within an area of approximately 1,890 acres. The total demand of 4,600 AFY equates to 100 percent of the projected wastewater flow at the DWTP for the year 2020. The projected wastewater flow through 2023 is 5,041 AFY. Existing percolation beds will provide approximately 895 AFY of supplemental disposal capacity. By combining the 4,600 AFY recycled water demand with the 895 AFY percolation capacity, the City's effluent management/disposal capacity will total approximately 5,495 AFY by 2023. This exceeds the projected wastewater effluent flow in 2023 and is therefore sufficient for effluent management requirements through the City's General Plan planning horizon.

Future phases of the Ultimate Recycled Water Project beyond Phase II will be developed as recycled water supply increases. This expanded recycled water use would require additional modifications to the recycled water distribution system.

It is anticipated that the Phase II Project will be implemented by 2013. Essential to implementing the Phase II Recycled Water Project are salinity control measures to reduce the wastewater effluent salinity to less than 700 mg/L. The City, County, and SBCWD have entered into a Memorandum of Understanding (MOU) for the preparation of the Hollister Urban Area Water and Wastewater Master Plan. One element of this MOU addresses water quality goals for recycled water. Specifically the MOU states that recycled water shall have a target goal of 500 mg/L TDS and shall not exceed 700 mg/L TDS. Additionally, the MOU states that drinking water shall not exceed 500 mg/L TDS or 120 mg/L hardness. This improved drinking water quality will also improve the quality of the wastewater effluent. The MOU states that these goals should be met no later than 2015. Reaching these water quality goals will require a number of measures.

These measures may include:

- Salinity Education Program
- Industrial Salt Control
- Water Softener Ordinance
- Demineralization of Source Water (wellhead treatment)
- Demineralization of Wastewater Effluent
- Concentration and Disposal of Brine

Figure ES-3: Phase I Interim Effluent Management Project Area

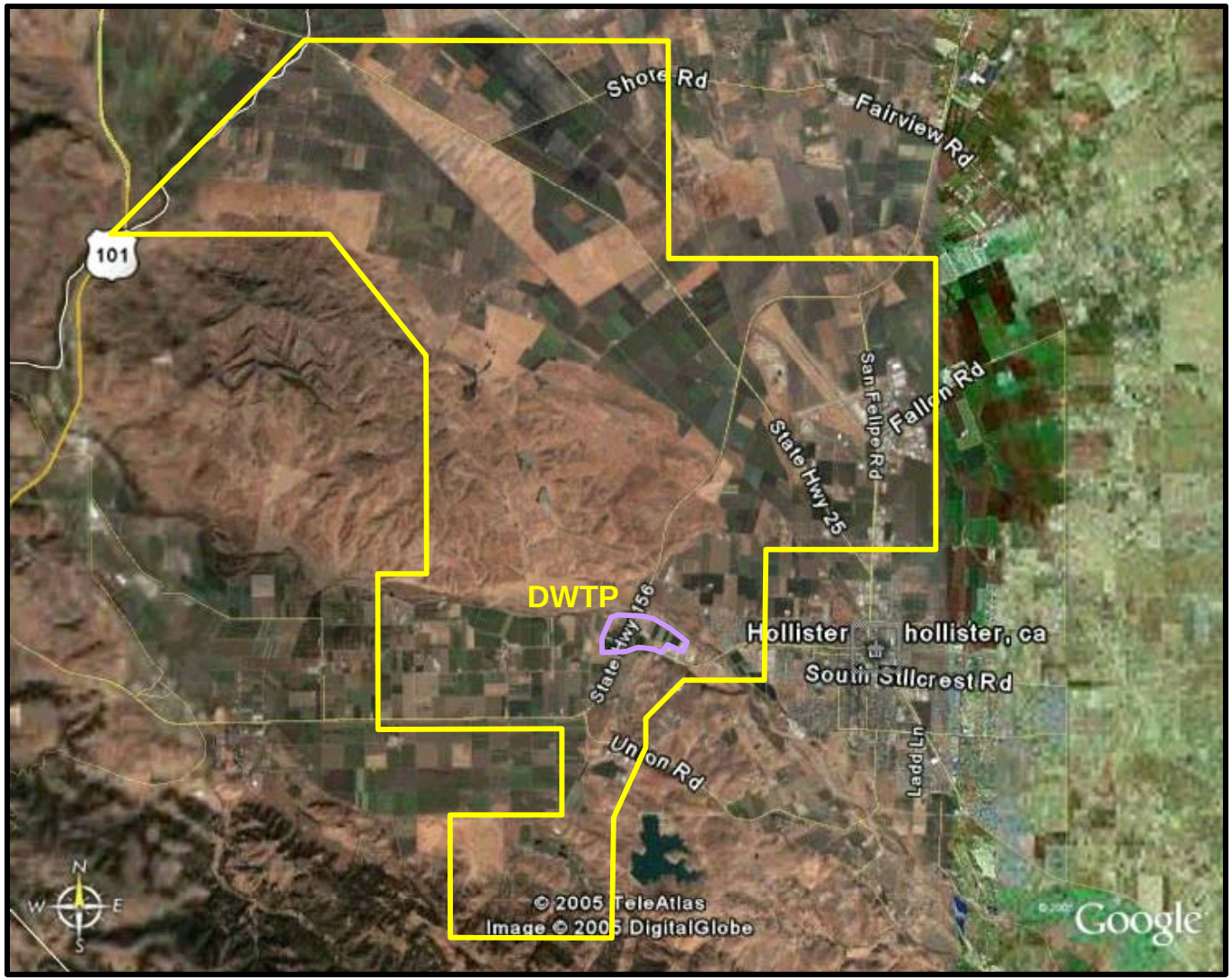


Figure ES-4: Ultimate Recycled Water Project

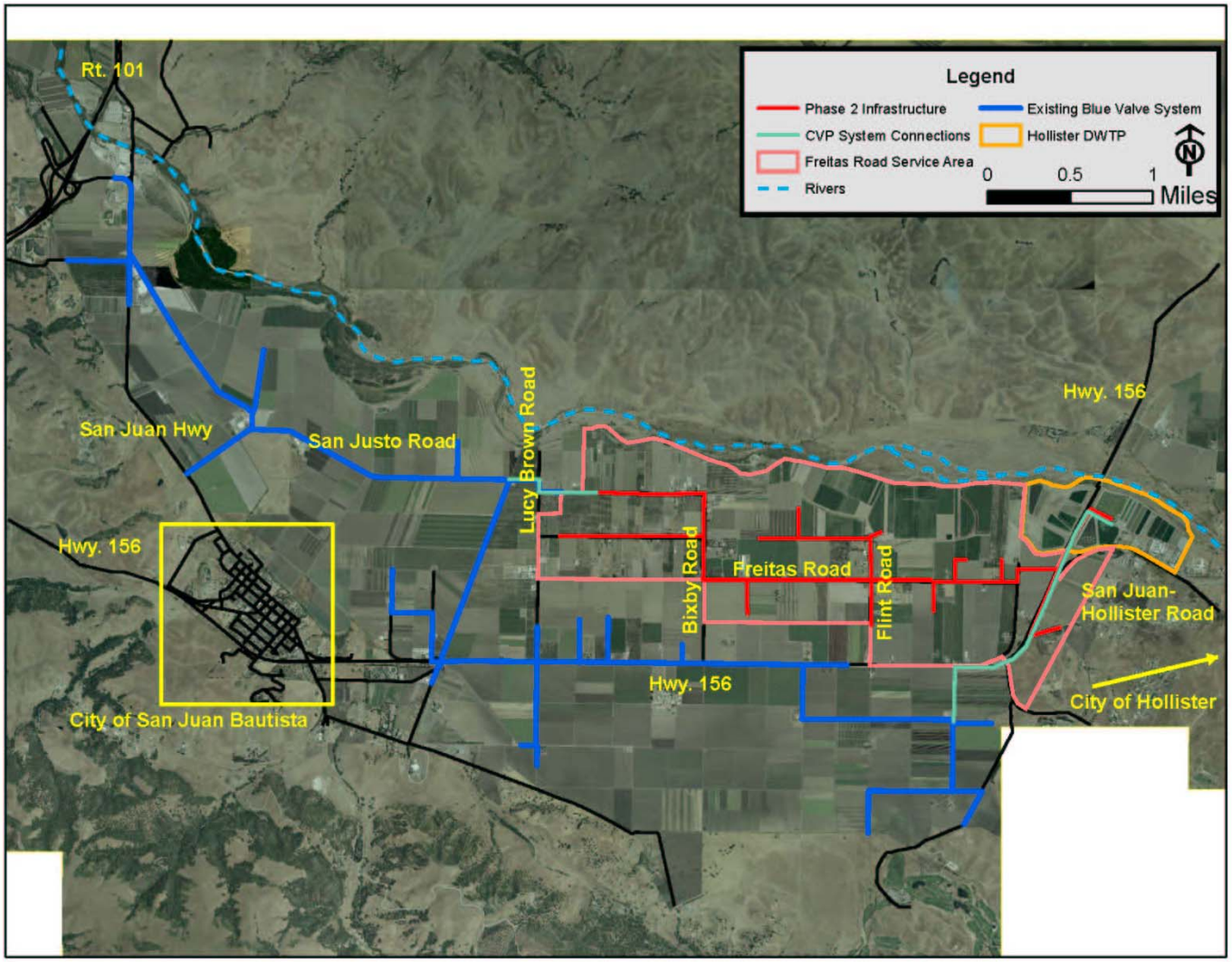
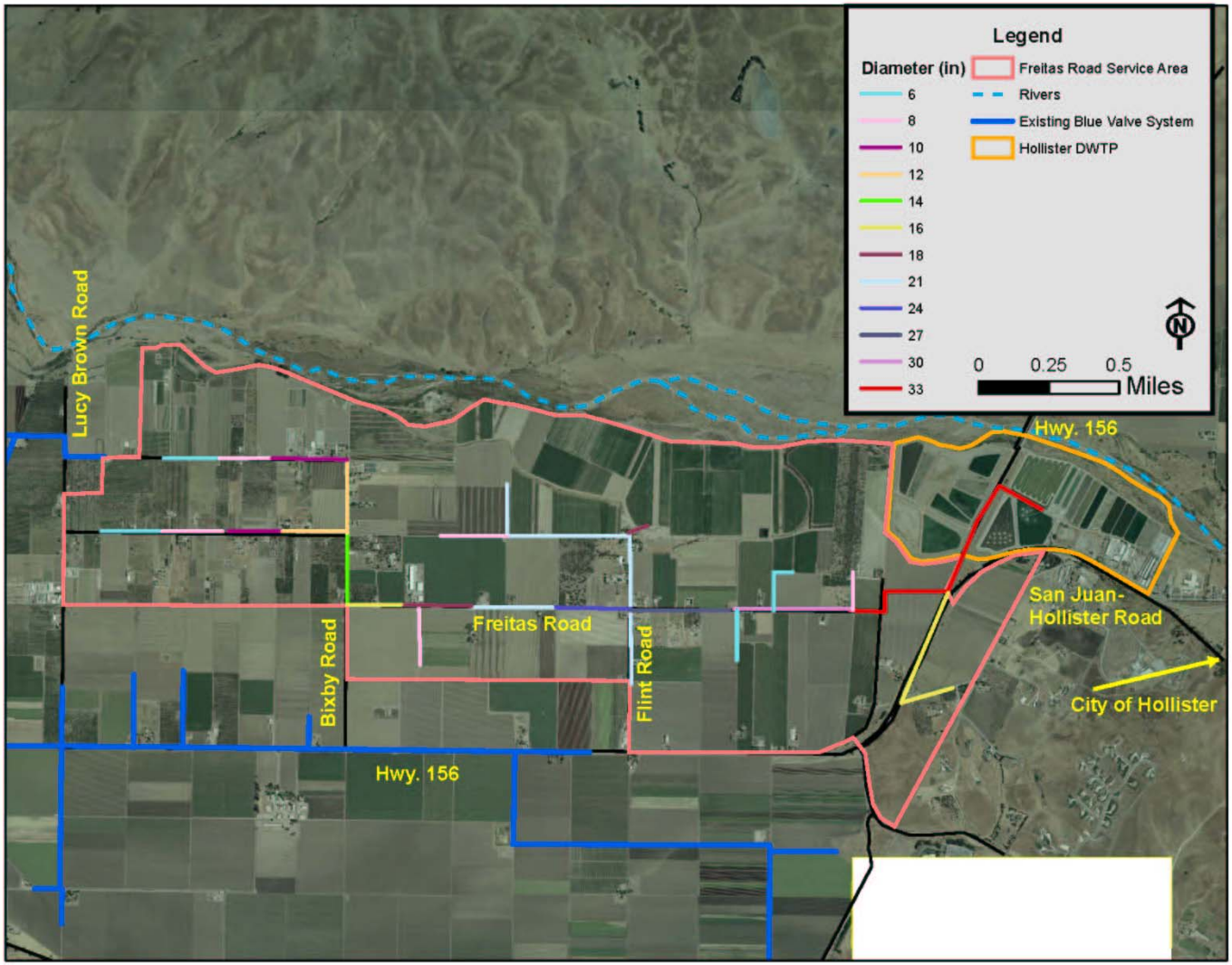


Figure ES-5: Recommended Phase II Recycled Water Project



CEQA Documentation

The City has begun preparation of a California Environmental Quality Act (CEQA) Environmental Impact Report (EIR) for the proposed project. The EIR will include the seasonal storage reservoir, treatment plant, spray fields (Phase I) and Recycled Water Project (Phase II).

Future Considerations

Comprehensive long-term wastewater planning is not possible until the *Hollister Urban Area Water and Wastewater Master Plan* has been completed. This Master Plan will integrate water and wastewater resource management with the regional general plans as well as policy guidelines adopted by the City, County and SBCWD. A major element of the Master Plan will be integration of potable water and wastewater quality improvements, which will result in high quality wastewater effluent suitable for all types of irrigation reuse and protection of the Groundwater Basin. The Master Plan is currently being prepared and is scheduled to be complete in December 2006.

Completion of the Master Plan will trigger an amendment of the LTWMP that will include an update of the implementation plan for the Phase II Recycled Water Project. The LTWMP will also identify specific projects to improve water and wastewater quality to allow reuse of treated wastewater without the need for blending with another source of higher quality water. The IWTP will also be addressed in more detail in the Master Plan.

Project Costs

Preliminary project cost estimates were developed for the various elements of the LTWMP. Capital costs include engineering, administration and construction management costs. Costs are indexed to September 2005 levels and a contingency of 20 to 30 percent of the base capital construction cost (without contractor overhead and profit) is included. The less defined the project element, the higher the contingency percentage that was applied. Costs are based on conceptual level planning and are believed to be accurate from +50 to –30 percent of the actual cost. The costs of land acquisition for the Phase I Project are not included in these costs. It is assumed that the City will negotiate leases with landowners for use of land as spray fields.

Annual operations and maintenance (O&M) costs include the estimated costs for power, chemicals, labor and maintenance of the facilities. The O&M costs for each reuse site are not included in the costs presented below. The site O&M costs are anticipated to be borne by the operator of the site and would be part of the operations agreement between the City and the site operator.

Estimated LTWMP Project Costs

LTWMP Capital Construction Costs Description	Capital Costs ($ millions)[a,b]	Engineering/ Admin ($ millions)	Construction Management ($ millions)[c]	Total Project Costs ($ millions)
Domestic Wastewater Treatment Plant	$ 52.64[d]	$ 5.26[e]	$ 5.26	$ 63.16
Phase I Seasonal Storage Reservoir[f]	$ 13.50[g]	$ 1.35[e]	$ 1.35	$ 16.20
Phase I Effluent Management Project[h]	$ 14.86 – 17.23[g]	$ 2.70 - 3.14[h]	$ 1.34 – 1.55[h]	$ 18.90 – 21.92[h]
Phase I Subtotal	**$ 81.00 – 83.37**	**$ 9.31 – 9.75**	**$ 7.95 – 8.16**	**$ 98.26 – 101.28**
Phase II Recycled Water Project[i]	$ 10.57 - 14.90[g]	$ 1.90 – 2.66[i]	$ 0.94 – 1.33[i]	$ 13.41 – 18.89[i]
Phase II Seasonal Storage Reservoir(s)	$ 4.60 - 7.15[g]	$ 0.92 – 1.43	$ 0.46 – 0.72	$ 5.98 – 9.30
Phase II Subtotal	**$ 15.17 – 22.05**	**$ 2.82 – 4.09**	**$ 1.40 – 2.05**	**$ 19.39 – 28.19**
Total Project Cost	**$ 96.17 – 105.42**	**$ 12.13 – 13.84**	**$ 9.35 – 10.21**	**$ 117.65 – 129.47**

[a] Based on September 2005 ENR construction index for San Francisco (SF CCI = 8265.45).
[b] Includes 10% allowance for Contractor overhead and profit.
[c] Construction Management Costs = 10% of Capital.
[d] Includes 20% Contingency.
[e] Engineering/Administration = 10% of Capital.
[f] Reservoir cost estimate assumes use of local clay soils for compacted clay liner. Use of a synthetic liner would add $ 7 – 8 million in total cost.
[g] Includes 30% Contingency.
[h] Cost estimate is range of costs presented in Technical Memorandum (RMC Water and Environment, 2005).
[i] Cost estimate is range of costs from Facility Plan (RMC Water and Environment, 2005).

Preliminary Annual O&M Costs

Description	Annual O&M Costs ($ millions/yr)
Domestic Wastewater Treatment Plant	$ 3.7
Seasonal Storage Reservoir	$ 0.1
Additional Storage Reservoir	$ 0.1
Phase I Interim Effluent Management Project	$ 0.3 – 0.4
Phase II Recycled Water Project	$ 0.1 – 0.4
Total Annual Cost	**$ 4.1 – 4.7**

Implementation Schedule

Water recycling in one form or another was identified as the only effluent management strategy that met all of the planning and selection criteria of the stakeholders. The Ultimate Regional Recycled Water Project proposed by the Water Resource Association of San Benito County provides the stakeholders with a region-wide plan for water recycling. Full implementation of this project however, can't be accomplished until the City has reduced TDS levels in its effluent to acceptable levels and the recycled water market in the region has been more fully developed.

Because effluent quality and market assurance require additional time to achieve, the City will implement the Phase I Interim Effluent Management Project to reduce effluent percolation into the basin as wastewater flows to the DWTP increase. The use of recycled water to irrigate forage and pasture land has been selected as the best interim project for the City to implement until such time as the Phase II Recycled Water Project can be implemented. It is feasible that some portion of the Phase I Project may be incorporated into the Phase II Recycled Water Project. The Phase I Interim Effluent Management Project will incorporate seasonal storage of recycled water to maximize reuse. It will also include a pilot program to evaluate the feasibility of blending wastewater with imported surface water for use on crops that are more sensitive to TDS than typical forage/pasture crops.

Extensive planning efforts and coordination by the participating stakeholders has contributed to both the knowledge base and policy foundation for managing water resources in the Hollister urban area and northern San Benito County. A key realization derived from this work is that there is not a single, long-term, reasonable, immediately available mechanism to dispose of treated wastewater.

Based on the above considerations, the City of Hollister proposes the following schedule in order to implement a phased recycled water program. The proposed implementation schedule contains milestones for revision and updating of the LTWMP based upon the additional master planning necessary to fully integrate water and wastewater resources to address water quality issues for the basin as well as further development of a local market for recycled water beyond forage and pasture.

Project Schedule

A preliminary schedule with a description of the key milestones for implementing the LTWMP is presented below. This schedule may change due to circumstances beyond the City's reasonable control, such as environmental reviews or delays. A key juncture in the proposed project schedule is scheduled to occur in the spring/summer of 2007. At that time the stakeholders will complete the *Hollister Urban Area Water and Wastewater Master Plan*. That effort will identify integrated work plans for long-term management and quality improvement of wastewater and long-term supply and quality of potable water. The ultimate disposition of the IWTP would also be addressed. Upon completion of the Master Plan, amendments to the LTWMP will be made to incorporate the implementation activities identified in the Master Plan with those identified in the *San Benito County Regional Recycled Water Project Facility Plan.* Additionally, a determination will be made as to whether additional forage/pasture reuse will be necessary prior to full implementation of the Phase II Recycled Water Project.

LTWMP Implementation Schedule

Activity	Completion Date[a]	Constraints/Comments
LTWMP	December 2005	The LTWMP will be submitted to the RWQCB for review and comment.
CEQA	August 2006	Completion of an Environmental Impact Report (EIR) for the LTWMP.
Finalize Design of Treatment and Storage Facilities	June 2006	Design of the DWTP and Seasonal Storage Reservoir will be finalized in conjunction with completion of CEQA review.
Award Treatment/Storage Construction Contract	August 2006	Award of contract for construction of MBR Wastewater Treatment Facility and the 1,500 acre-foot seasonal storage reservoir.
Hollister Urban Area Water and Wastewater Master Plan	December 2006	Completion of Master Plan which integrates water and wastewater resource management with City and County General Plans and policy guidelines adopted by the City, County and San Benito County Water District.
Amend LTWMP	March 2007	The LTWMP will be amended upon adoption of the Hollister Urban Area Water and Wastewater Master Plan. Specific updates to the LTWMP will include: • Identification of specific actions and timelines for implementing the Phase II Recycled Water Project. • Disposition of IWTP. • Identify water quality improvement actions. • Development of additional forage and pasture land (if required). • Update of the implementation schedule (if required).
Acquisition of Forage/Pasture Land	April 2007	In order to complete construction of the Phase I Interim Effluent Management Project concurrently with the DWTP, additional land must be acquired or leased.
Finalize Design of Phase I Interim Effluent Management Project	April 2007	Design of Phase I distribution, pumping and forage/pasture reuse facilities.
Award Phase I Interim Effluent Management Project Construction Contract	May 2007	Construction of the Phase I Interim Effluent Management Project should be completed by start-up of the DWTP.
Complete Construction of Phase I Seasonal Storage Reservoir	September 2007	The Phase I seasonal storage reservoir must be constructed prior to the 2007/2008 wet weather season because the capacity of the City's percolation ponds will be reduced during construction of the DWTP project.
Complete Construction of the DWTP	December 2007	The construction of the DWTP must be completed by December 31, 2007.

Activity	Completion Date[a]	Constraints/Comments
Complete Construction of the Phase I Interim Effluent Management Project	March 2008	Construction of the Phase I Interim Effluent Management Project Facilities must be complete by the end of the 2007/2008 wet weather season.
Salinity Control Program Complete	2015[a]	Completion date set by MOU.
Complete Design of Phase II Recycled Water Project	August 2013[a]	Design of Phase II Recycled Water Project should be scheduled to facilitate completion of construction of these facilities by March 2015 or earlier if recycled water salinity is sufficiently reduced.
Award Phase II Recycled Water Project Construction Contract	March 2014[a]	Construction of the Phase II Recycled Water Project should be complete by March 2015.
Complete Construction of Phase II Recycled Water Project	March 2015[a]	Completion to coincide with achievement of salinity goals by 2015 (Ref: MOU).

[a] Dates may be amended in March 2007 after completion of the Hollister Urban Area Water and Wastewater Master Plan.

The following schedule graphically shows the proposed implementation plan for the LTWMP for the City of Hollister. This schedule shows the project timelines for the treatment, storage, and interim effluent facilities and project planning.

Figure ES-6: Proposed LTWMP Project Schedule